/410 cont./

*511 *262 is a high average, but does not seem excessive to us. Still, one must consider the six families where more of it is consumed: from 5 to 7.5 liters per person per month. This is indeed a great deal. With these families eliminated, the average falls to 1.9 liters, and it is reached or exceeded by 25 families. Only two figures for consumption are low: those for Nos. 1 (0.5 and 19 (0.1).

[435] But oil is expensive, 100 francs a liter on the average, and its consumption /411/ is therefore limited; thus, No. 4 in our series, with the purchase of 15 liters monthly, 2.8 per man, devotes 21.1% of his income to it (Table VIII).[1] An individual of No. 2, who consumes 1 1/2 liters of it each month, uses 12.6% of his income for it. And what would become of the budget of No. 1 if all the members of the unit of consumption picked up the notion of consuming the average two and a half liters; the purchase of the 25 liters required would take 42.8% of the family income.

Moreover, it is significant to see that the quantities of oil consumed do not increase with the incomes. Among the last nine families there is no figure higher than four liters per man per month.

*511 *262 263 We have grouped under the rubric "Condiments" (Table VIII) commodities that in fact are quite dissimilar. Their caloric value is of little importance. Nevertheless the height of misery for the Africans would be to be unable to relieve their diets, first, with condiments properly speaking, pepper, salt, vinegar, pimentos, then with small quantities of vegetables, properly qualifying as condiments because they are bought in only very small quantities, and finally with dried fish, whose flavor is infinitely superior to that of fresh fish; it often replaces the latter in the rice with fish, if not in quantity, at least in quality.

The percentages given in this column of Table VIII thus refer to a whole group of minor products, from the crushed baobab leaf to the slices of dried fish: parsley, onions, garlic, bits of sugar beets and cabbage, ground tomatoes, various

[1] [see cat 116, pp 40-42 - ANALYST]

*511 /411 cont./
*262 products of gathering. All, let us repeat, in very small daily
263 quantities. Moreover, these are the products[1] that are the
443 objects involved in the small-scale commerce of the women;
434 quite often buying two or three times more than they need,
*511 they set up a little flat basket before the door of their con-
438 cession and suggest to the passers-by that they spare them-
selves the fatigue of going all the way to the market. They
can make very small profits in this way, from five to ten francs
a day.

*511 Nevertheless, with one thing added to another, the costs
*262 of these various condiments end up by absorbing another rela-
263 tively important part of the familial income (1).

1. The portion for dried fish is generally very close to 1/5 of the figures given.

The size of this income thus acts as a check on their consumption, but ultimately only the taste and the habits of each are truly determinative. /412/ /Table VIII appears here./ /413/ /Table IX appears here./

/414/ We mentioned under the rubric "Vegetables" only the truly important purchases. It is the housewife herself who calls them either vegetables or condiments, according to the importance that they will have in the meal that she is going to prepare; a greater quantity of vegetables will permit reducing the quantity of rice or millet. If the latter does not change, they are condiments. The nuance is understandable. Our investigators themselves made it, and it was subsequently difficult for us not to take it into account.

*511 The quantities given in Table IX[2] are not actual quantities.
*262 We have again in this case eliminated the factor of quality, the differences in quality being replaced by differences in quantity. The "standard vegetable" chosen was the cabbage,
[435] which in March 1953 was worth 20 francs a kilogram. This

1 [i.e. - various condiments - ANALYST]
2 [see cat 116. pp 43-45 - ANALYST]

[Text continues on p. 46]

4: Mersadier--40 U-5 (1954) 1955 MS37 Senegal MS37

*511
*262
263
/412/

Table VIII

No.	Ethnic Group	Occupation	Income	% of Income for Condiments	% of Income for Vegetables	% of Income for Manioc	% of Income for Oil
1	Sarakolé	Laborer	5,800	1.9	2.3	0.2	6.8
2	Peul	Orderly	6,100	3.1	5.8	--	12.6
3	Wolof	Laborer	6,500	2.0	3.4	0.6	8.1
4	Sérère	Laborer	6,700	4.5	8.1	2.1	21.1
5	Toucouleur	Orderly	6,745	8.5	5.0	1.3	7.7
6	Wolof	Mattress-maker	7,000	6.5	3.1	1.9	8.2
7	Wolof	Laborer	7,000	8.2	2.7	3.5	13.2
8	Wolof	Orderly	7,410	3.5	6.3	1.4	8.7
9	Wolof	Baker	7,500	7.7	2.7	1.5	12.6
10	Wolof	Cultivator	8,150	4.9	1.7	--	5.7
11	Moor	Auxiliary	8,950	5.4	7.4	1.0	12.0
12	Peul	Laborer	9,000	4.1	1.0	1.3	14.0
13	Wolof	Laborer	9,800	2.6	5.3	1.3	20.4
14	Wolof	Cultivator	10,000	6.2	1.9	2.9	9.9
15	Bambara	Laborer	10,000	6.5	2.0	2.6	14.3

4: Meradier--41 U-5 (1954) 1956 MS37 Senegal MS37

*511 *262 263 /412 cont./

Table VIII (cont.)

No.	Ethnic Group	Occupation	Income	% of Income for Condiments	% of Income for Vegetables	% of Income for Manioc	% of Income for Oil
16	Bambara	Auxiliary	10,675	9.0	13.5	2.0	5.2
17	Moor	Auxiliary	10,800	3.2	5.6	0.8	9.7
18	Peul	Spec. laborer	11,000	4.6	5.2	1.3	18.1
19	Toucouleur	Accountant	11,950	3.8	3.8	1.0	5.6
20	Bambara	Auxiliary	12,000	7.7	8.3	2.2	9.3
21	Wolof	Clerk	13,000	7.6	9.4	1.0	7.6
22	Wolof	Auxiliary	14,000	5.9	9.2	0.9	10.7
23	Wolof	Cultivator	15,000	4.5	1.6	2.2	7.3
24	Wolof	Cultivator	15,000	2.4	1.4	2.2	8.9
25	Wolof	Auxiliary	15,630	3.9	5.7	0.7	5.7
26	Wolof	Employee P. T. T.	15,800	7.7	8.7	--	8.9
27	Wolof	Shoemaker	16,200	2.7	1.3	1.0	2.8
28	Wolof	Worker	22,000	3.7	6.0	1.1	12.4
29	Toucouleur	Police sergeant	22,000	2.0	2.9	--	11.8
30	Wolof	Weigher	24,000	3.1	5.9	0.4	7.6
31	Wolof	Carpenter	25,000	2.0	--	1.3	9.6

4: Mersadier--42 U-5 (1954) 1955 MS37 Senegal MS37

* 511
*262
263
/412 cont./

Table VIII (cont.)

No.	Ethnic Group	Occupation	Income	% of Income for Condiments	% of Income for Vegetables	% of Income for Manioc	% of Income for Oil
32	Wolof	Cultivator	25,000	2.2	0.8	1.1	3.9
33	Sérère	Chauffeur	25,000	1.7	2.6	0.6	9.1
34	Wolof	Employee P. T. T.	25,900	1.8	3.0	--	6.7
35	Wolof	Managerial Employee	27,000	5.7	8.9	2.5	5.6
36	Wolof	Private accountant	34,000	2.6	7.7	0.1	13.3
37	Wolof	Truck gardener	36,000	1.5	5.2	1.0	3.3
38	Wolof	Jeweler	50,000	3.8	5.1	0.1	6.5
39	Sarakolé	Teacher	51,000	0.8	2.6	--	1.7
40	Wolof	Chief worker	55,000	0.7	3.0	0.5	6.5
41	Sarakolé	Head employee	55,500	1.0	2.3	--	2.0
42	Bambara	Chief worker	56,000	2.3	1.8	0.2	2.4
43	Wolof	Doctor	81,000	1.7	1.9	--	0.3

*511 *262 263

/413 cont./

Table IX (cont.)

No.	Income	U.C.	Theor. Comp.	Vegetables Qt. (kg.) (kg.)	Vegetables I.M. (kg.)	Manioc Qt. (kg.)	Manioc I.M. (kg.)
34	25,900	4	3.3	39.0	11.0	1.0	0.3
35	27,000	6	4.6	121.1	26.0	8.2	1.7
36	34,000	15	12.6	132.4	10.5	3.1	0.2
37	36,000	24	19.8	94.6	5.0	21.0	1.0
38	50,000	13	10.5	129.7	12.8	4.7	0.5
39	51,000	11	8.0	66.5	8.3	--	--
40	55,000	24	17.5	84.7	4.8	15.8	9.3
41	55,500	14	10.0	65.0	6.2	12.0	1.2
42	56,000	11	8.6	53.2	6.1	7.3	0.9
43	81,000	5	4.0	79.3	19.7	--	--

/415 cont./

*511
*262

have no purchase price from which we could have obtained a valid weight in "cabbage unit."

No. 36, which consumes neither meat nor millet, normally makes up for this with vegetables. With No. 38 we are in the category of higher incomes where no restriction is envisaged by reason of size of family. It is undoubtedly with this family that we reach the upper limit of the consumption of vegetables.

Let us recall once more that though the costs are the actual costs, the quantities are fictive. Hence, it is not 19.7 kilograms of cabbage that an individual of family 36 consumes each month. For the latter in particular (the only one where we saw the housewife shell peas) it is the highness of the quality, hence of the price, that has led us to a figure likewise high. The observation is valid for the other families that we shall cite; the reduction of the composition of the unit of consumption permits improvement not only in the quantity but also in the quality of the products consumed.

Beside the columns "Vegetables" we have put the information received concerning manioc. Cheap food (from 14 to 17 francs a kilogram), it is not greatly liked by the Africans. But it has spread widely; its cultivation requires almost no care, and the yields are high.

[435]

It is therefore used especially as a food to tide one over; it is to be noted that, with one exception, the families consuming the most are never those who uniformly consume more than ten kilograms of vegetables per individual. In only one case was more than 3% of the income devoted to it.

We shall have finished the study of the principal food commodities after having mentioned sugar and milk (Tables X and XI).[1]

*511
263

The average consumption of sugar per individual is 1.7 kilograms for one month. But we find only a few figures that are very far below this average. The highest figure is 2.7.

[1] [see ant 116, pp 51-56 - ANALYST]

/415 cont./

*511 263 Most of them are very close to the average. There is thus a kind of uniformity in the consumption of sugar, and it is probably that here, too, we are in the presence of an upper limit.

/416/ The portion of the income devoted to sugar is thus going to vary according to the size of the income and the composition of the unit of consumption. The maximum noted is 10% for No. 4, the minimum 0.3 for No. 43 (1.2 for No. 42).

*511 272 [177] The same uniformity does not exist for sweetened condensed milk. Its use is spreading more and more, but all the same there are ten families who do not consume it at all.

The average consumption was established, for one man, at 589 grams per month for the 43 families, at 767 if one eliminates those that do not consume any.

Fourteen families out of 33 are above this average, only four of whom are in the top of the table. And, as in the case of vegetables, these 24 families are precisely the least numerous. The largest theoretical composition of the unit of consumption among these 24 families is that of No. 38, 10.5. But this is for an income of 50,000 francs per month. The next maximum is 8.6 for No. 29. Here, too, the size of the unit of consumption is essential.

Twenty-seven families utilize fresh milk besides or to supplement the condensed milk. Only two did not consume either one. But this consumption of fresh milk is quite limited; the average, solely for the utilizers, is 1.1 liters. It is habitual in only one case, No. 42, where a liter is bought every day. Moreover there is no periodicity anywhere. Fresh milk is therefore not used systematically for only breakfast. It is preferably [264] utilized for the rice mush that many families like to eat in the [855] afternoon. It is then reserved for women and children. This is the only point where we found a special diet for children, except from time to time when a mango or guava is bought solely for them.

[435] Fresh milk costs more proportionally than condensed milk: 40 francs a liter as against 40 francs for a case of 400 grams of Nestlé milk.

*511 *262 ●263 272 /418/

Table X

No.	Occupation	Income	U. C. Theor. Comp.	% of Income for Condensed Milk	% of Income for Fresh Milk	% of Income for Coffee	% of Income for Sugar	% of Income for Bread
1	Laborer	5,800	10	3.4	0	--	5.6	11.0
2	Orderly	6,100	5.5	--	2.3	0.2	7.0	6.2
3	Laborer	6,500	2.8	0.6	3.9	0.3	5.5	2.7
4	Laborer	6,700	5.10	4.1	1.4	3.5	10.0	2.6
5	Orderly	6,745	5.6	4.1	4.5	3.2	3.5	5.9
6	Mattress-maker	7,000	4.8	9.5	9.5	3.0	9.5	7.9
7	Laborer	7,000	3.8	--	3.1	--	6.1	10.1
8	Orderly	7,410	4.4	6.1	3.0	1.3	4.7	7.9
9	Baker	7,500	4.4	--	2.7	--	4.3	11.8
10	Cultivator	8,150	9.6	1.4	6.0	2.2	6.2	6.6
11	Auxiliary	8,950	4.5	--	--	--	1.5	1.1
12	Laborer	9,000	6.3	0.1	2.0	--	3.8	3.3
13	Laborer	9,800	4.4	0.8	1.1	1.0	5.2	4.1
14	Cultivator	10,000	8,9	--	1.9	--	5.5	10.3
15	Laborer	10,000	5.5	--	1.3	--	3.8	6.9
16	Auxiliary	10,675	1.8	1.1	0.7	2.5	2.0	6.0

4: Mersadier--52 U-5 (1954) 1955 MS37 Senegal MS37

* 511
*262
● 263
272

Table X (cont.)

/418 cont./

No.	Occupation	Income	U. C. Theor. Comp.	% of Income for Condensed Milk	% of Income for Fresh Milk	% of Income for Coffee	% of Income for Sugar	% of Income for Bread
17	Auxiliary	10.800	6.9	--	0.7	--	5.1	3.1
18	Spec. laborer	11.000	3.6	0.7	0.3	0.2	2.5	3.3
19	Accountant	11.950	7.1	6.1	--	2.5	2.8	5.1
20	Auxiliary	12.000	7.6	3.0	0.4	1.2	5.5	10.2
21	Clerk	13.000	3.8	9.4	1.8	1.9	4.8	6.2
22	Auxiliary	14.000	9.2	0.9	1.0	--	3.0	7.7
23	Cultivator	15.000	13.4	--	1.7	--	9.8	9.9
24	Cultivator	15.000	14.4	0.1	0.9	2.0	4.0	6.6
25	Auxiliary	15.630	11.9	0.7	3.2	2.7	2.2	2.0
26	Employee P. T. T.	15.800	2.3	3.1	--	3.4	2.8	2.4
27	Shoemaker	16.200	9.1	0.1	2.2	0.9	2.6	3.4
28	Worker	22.000	14.7	--	--	1.3	9.0	4.8
29	Police sergeant	22.000	8.6	6.0	3.0	2.5	3.8	9.7
30	Weigher	24.000	5.1	2.3	--	1.3	3.4	4.5

*511
*262
●263
272

/418 cont./

Table X (cont.)

No.	Occupation	Income	U. C. Theor. Comp.	% of Income for Condensed Milk	% of Income for Fresh Milk	% of Income for Coffee	% of Income for Sugar	% of Income for Bread
31	Carpenter	25,000	14.4	3.8	--	4.6	2.5	3.2
32	Cultivator	25,000	4.8	--	1.7	--	2.2	3.9
33	Chauffeur	25,000	5.1	0.8	--	3.9	2.2	3.2
34	Employee P.T.T.	25,900	3.3	1.1	0.7	1.0	11.9	3.3
35	Managerial employee	27,000	4.6	1.6	0.9	1.2	2.2	3.0
36	Private accountant	34,000	12.5	0.9	0.6	1.0	1.3	1.9
37	Truck-gardener	36,000	19.8	3.1	--	6.7	2.5	3.3
38	Jeweler	50,000	10.5	2.3	00	1.1	1.7	3.3
39	Teacher	51,000	8	1.7	--	--	2.5	2.5
40	Chief worker	55,000	17.5	1.6	--	2.9	2.2	2.0
41	Head employee	55,500	10.4	2.5	--	--	2.0	2.5
42	Chief worker	56,000	8.6	1.2	2.4	--	1.2	3.5
43	Doctor	81,000	4	0.5	--	1.2	0.3	1.7

4: Mersadier--54 U-5 (1954) 1955 MS37 Senegal MS37

* 511 /419/
● 263
272

Table XI

No.	Income	Ethnic Group	Sugar Qt. (kg.)	Sugar I. M. (kg.)	Condensed Milk Qt. (gr.)	Condensed Milk I. M. (gr.)	Fresh Milk Qt. (l.)	Fresh Milk I. M. (L.)
1	5,800	Sarakolé	6.2	0.6	2,000	200	--	--
2	6,100	Peul	7.2	1.3	--	--	3.4	0.6
3	6,500	Wolof	7.4	2.6	400	142	6.3	2.2
4	6,700	Sérère	11.7	2.3	2,800	549	2.2	0.4
5	6,745	Toucouleur	4.0	0.7	2,800	500	7.4	1.3
6	7,000	Wolof	12.4	2.6	6,650	1,380	16.6	3.4
7	7,000	Wolof	9.7	1.2	--	--	5.5	1.4
8	7,410	Wolof	6.0	1.3	4,550	1,034	5.5	1.2
9	7,500	Wolof	5.0	1.1	--	--	5.1	1.1
10	8,150	Wolof	10.0	1.1	1,200	125	14.2	1.4
11	8,940	Moor	2.5	0.6	--	--	--	--
12	9,000	Peul	6.3	1.0	150	238	4.6	0.7
13	9,800	Wolof	7.5	1.8	600	136	2.5	0.5
14	10,000	Wolof	11.5	1.3	--	--	4.6	0.5
15	10,000	Bambara	8.0	1.5	--	--	3.3	0.6
16	10,675	Bambara	4.0	1.2	1,200	370	1.8	0.5

4: Meradier--55 U-5 (1954) 1955 MS37 Senegal MS37

*511
• 263
272

/419 cont./

Table XI (cont.)

No.	Income	Ethnic Group	Sugar Qt. (kg.)	Sugar I. M. (kg.)	Condensed Milk Qt. (gr.)	Condensed Milk I. M. (gr.)	Fresh Milk Qt. (l.)	Fresh Milk I. M. (l.)
17	10,800	Moor	7.7	1.1	--	--	1.8	0.2
18	11,000	Peul	2.0	0.5	800	222	--	--
19	11,950	Toucouleur	4.5	0.7	7,400	1,098	--	--
20	12,000	Bambara	10.2	1.4	3,600	470	1.2	0.1
21	13,000	Wolof	10.0	2.6	12,370	3,255	6.1	1.6
22	14,000	Wolof	7.0	0.7	1,350	148	3.2	0.3
23	15,000	Wolof	12.6	0.9	--	--	6.4	0.4
24	15,000	Wolof	12.0	0.8	200	138	3.5	0.2
25	15,630	Wolof	6.0	0.5	1,140	95	12.6	1.0
26	15,800	Wolof	4.0	1.7	5,000	2,173	--	--
27	16,200	Wolof	8.7	1.0	300	329	9.1	1.0
28	22,000	Wolof	8.0	0.5	--	--	--	--
29	22,000	Toucouleur	15.0	1.7	15,000	1,744	16.7	1.9
30	24,000	Wolof	15.0	2.9	5,600	1,100	--	--
31	25,000	Wolof	11.0	0.7	9,660	670	--	--
32	25,000	Wolof	11.6	2.5	--	--	11.1	2.3

*511
263
272

Table XI (cont.)

No.	Income	Ethnic Group	Sugar Qt. (kg.)	Sugar I.M. (kg.)	Condensed Milk Qt. (gr.)	Condensed Milk I.M. (gr.)	Fresh Milk Qt. (l.)	Fresh Milk I.M. (l.)
33	25.000	Sérère	8.5	1.7	2,000	400	--	--
34	25,900	Wolof	9.0	2.7	3,000	910	4.9	1.4
35	27,000	Wolof	10.5	2.3	4,400	950	0.5	--
36	34,000	Wolof	8.6	0.7	3,150	252	5.5	0.4
37	36,000	Wolof	6.2	0.3	11,400	575	--	--
38	50,000	Wolof	14.7	1.4	11,500	1,100	--	--
39	51,800	Sarakolé	20.0	2.5	8,400	1,050	--	--
40	55,000	Wolof	20.0	1.1	8,800	500	--	--
41	55,500	Sarakolé	20.0	1.9	14,400	1,380	--	--
42	56,000	Bambara	13.5	1.6	6,900	802	34.7	4.0
43	81,000	Wolof	5.0	1.2	4,200	1,300	--	--

4: Mersadier--56 U-5 (1954) 1955 MS37 Senegal MS37

/37 cont./

This is the most common preparation, but the native cuisine is acquainted with a host of others. The couscous is light, refreshing, and very nourishing. S 262

Millet is also given to horses. Basi is used the most in this practice, but souna gives them more vigor, although heating them up more. S 231

The Africans, by making millet germinate and putting it in water to boil for several days, obtain a kind of invigorating beer (pouh in Wolof), but one which, if taken in great quantities, produces a very heavy drunkenness. Millet, just like maize, fattens animals quickly, especially poultry. S W 273 S 231

Sorghum is a plant widely cultivated in Senegal. It is necessary to accustom the Senegalese farmer as rapidly as possible to replacing the ordinary variety by that of the sweet sorghum, that is, the saccharatum variety, which would have the advantage of giving sugar and grain. This saccharatum variety is utilized a great deal in the United States for the production of sugar. Then a sugar refinery would be created, which would be one more source of wealth for this country, wealth all the more appreciable because the African is fond of delicacies and a great consumer of sugar (mint tea, Moorish coffee, and infusions). S 243 [193] [263] [272]

Rice. It is cultivated in Senegal in damp places, on the edges of marigots /watercourses/, in Sine, in Casamance, and at the mouth of the river (Richard-Toll, etc.). A large number of varieties is known, some of which grow in relatively dry and high places; black rice is one of them.

The African rice is Oryza glaberrima, but wild rice grows by itself; this is Oryza latifolia (punctata and sylvestris). The native rice is much more in demand by the Africans and often even by the Europeans than foreign rice. African cooks excel in preparing rice in all kinds of ways. S [137] S 262

Rice is emollient, soothing, very nourishing, and not at all binding or constipating as is sometimes thought. It also gives a beer by fermentation. Rice water renders great service in dysentery, as a beverage, and for bathing. Rice water is also a cooling drink for feverish and inflammatory ailments. Finally, rice powder is useful as an absorbent for skin diseases. S 273 757 [272] [515]

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 39

Gambia, often in rotation with ground-nuts. Of the quick-maturing varieties *souna* and *sanio* are the most popular, the former thriving in sandy soil, the latter in heavier ground. Several kinds of sorghum are also cultivated. In the river area millet is sown where the floods have subsided and is harvested in April. In other parts it is planted immediately before the rainy season. Production probably averages about 300,000 tons annually. The export of millet from one province to another is controlled according to local needs.

Rice. The area flooded by the Casamance is naturally suited for rice cultivation. The rice-fields are handed down from father to son, each family growing sufficient for its own consumption and to pay its taxes. A store of rice is always kept to guard against a lean year or to be exchanged for some other commodity required.

Sugar-cane. This is grown near every village where there is enough water. No attempt has been made to commercialize the crop, and the West African varieties are more woody and contain less juice than those grown elsewhere for export. Sugar-cane (*Saccharum officinarum*) is a perennial plant of the grass family. It is easy to grow, even near the sea, but takes at least a year to mature. When grown for local use, as it is here, sugar is not extracted, but the red or white stems are chewed.

The Baobab. The baobab (*Adansonia digitata*) is found generally in the thornland (Plate III), and is, therefore, much in evidence in Senegal. It is remarkable for the large girth of its trunk in comparison to its branches and leaves. The long green fruit, known as monkey-bread, is used as a food or as a seasoner. Boiled with water and then cooled, it also makes a refreshing drink, while the leaves and the young shoots are also good to eat. The inner bark yields a tough fibre, which can be twisted into rope or woven into a waterproof cloth. About 30 years ago a factory was opened at Dakar to prepare the fibre for export to rope- and paper-making firms in France. The bark and fibre can be stripped off without causing the death of the tree.

Manioc, beans, and maize are grown generally in the vicinity of villages. In the Cape Verde peninsula these, as well as yams, sweet potatoes, and melons, are grown for the Dakar markets.

Economic Crops

Ground-nuts. Ground-nuts (*Arachis hypogaea*) require a tropical climate and an annual rainfall of from 14 to 60 inches. They are the